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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,864	07/06/2000	KAZUHIKO TAKAHATA	2000-0956A	4446

7590 10/06/2003

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EXAMINER

AKKAPEDDI, PRASAD R

ART UNIT PAPER NUMBER

2871

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/582,864

Applicant(s)

TAKAHATA ET AL.

Examiner

Prasad R Akkapeddi

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 27 and 40-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27 and 40-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Group I, Species E corresponding to claims 40-44 and claim 27 being generic as stated in the Office action dated May 22, 2003 in Paper No. 10 is acknowledged.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 27, 40-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawai et al. (Sawai) (U.S. Patent No. 6,020,945).

Sawai discloses a touch-input type liquid crystal display device with an upper polarizer (6), a lower polarizer (2), a transparent touch panel (12) disposed between the upper polarizer (6) and the lower polarizer (2), an upper optical phase difference film (7), an electrode portion (ITO film), a stationary electrode portion (ITO film) and a lower optical phase difference film (11) and a liquid crystal display (1), wherein a space is interposed between the upper optical phase difference film (7) and the lower optical phase difference film (11), the transparent touch panel is disposed between the upper polarizer and the liquid crystal display (Fig. 9), the upper and lower optical phase difference film is

capable of providing a  $1/4$  wavelength phase delay to light, incident thereon, having a center wavelength within a visible region (550 nm) (col. 7, lines 9-16) and (col. 8, line 3).

In Fig. 2, Sawai also discloses the various angles such as an angle formed by an optical axis of the upper optical phase difference film (7) and a polarization axis of the upper polarizer (6) is about  $45^\circ$  and an angle formed by an optical axis of the lower optical phase difference film (11) and linearly polarized light to be outputted from the liquid crystal display (1) is about  $45^\circ$  and an angle formed by the optical axis of the upper optical phase difference film and the optical axis of the lower optical phase difference film is about  $90^\circ$  (col. 7, lines 28-29), and an angle formed by the polarization axis of the upper polarizer (6) and linearly polarized light to be outputted from the liquid crystal display is about  $90^\circ$  (Fig. 2). In Fig. 14, Sawai discloses that the liquid crystal display is disposed between the transparent touch panel and the lower polarizer (140).

Sawai also discloses a hard coating (Fig. 3), a PET film (a transparent adhesive layer) bonded to the ITO film, anti reflective coatings (col. 1, line 52). Hard coatings are low in moisture permeability.

Sawai does not explicitly state a movable electrode portion on a lower surface of the upper phase difference film. However, Sawai discloses an ITO film as an electrode on the lower portion of the upper phase difference film (7) which is a part of the touch panel.

Since the device is a touch panel and the ITO film is rather flexible that can move under pressure. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the ITO film as a movable electrode because of the thinness of the structure and such a function is inherent.

4. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sawai in view of Sugiyama et al. (Sugiyama) (U.S. Patent No. 5,498,657).

Sawai does not disclose an antifouling processed layer.

Sugiyama in disclosing a fluorine containing polymer composition, discloses that such a composition could be used as an antifouling layer for devices such as touch-panels, liquid crystals etc. (col. 15, lines 37-59).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the polymer composition as disclosed by Sugiyama to the device of Sawai for improving mechanical properties, scratch resistance and creep resistance (col. 10, lines 60-67) and (col. 11, lines 1-5).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prasad R Akkapeddi whose telephone number is 703-305-4767. The examiner can normally be reached on 7:00AM to 5:30PM M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on 703-305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

*BRA*

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Prasad R Akkapeddi  
Examiner  
Art Unit 2871

*[Signature]*  
TOANTON  
PRIMARY EXAMINER